

## Patient Satisfaction with Methadone Maintenance Treatment Program (MMTP) in MMTP Service Center

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### Abstract

### Original Research Article

Methadone Maintenance Treatment Program (MMTP) is one of harm reduction due to drug abuse. The goal of MMTP is to reduce drug use, high-risk behavior, criminal behavior, increase productivity, family support, and housing condition. MMTP was first held in Indonesia in the pilot phase in 2003, and in Yogyakarta has been implemented since 2006. Currently, have been provided four MMTP satellite services are Grhasia hospital, Gedongtengen primary health care center (PHC), Umbulharjo I PHC and Banguntapan II PHC. The patient-satisfaction implementation of MMTP has not yet been evaluated. This study aimed to evaluate MMTP services implementation, outcome, and patient satisfaction in MMTP Service center Yogyakarta. Descriptive research with cross-sectional design. Subjects were 32 MMTP active patients. The independent variable is the implementation of MMTP services and the dependent is patient-satisfaction. The research instruments used questionnaires, document observation, and interview guides. Indicators patient-satisfaction of achievement MMTP services of each parameter being measured in services quality and convenience, health workers capacity and responsiveness, and easy access to service locations. The achievement of the implementation of each MMTP service reaches > 80%. The achievement of patient satisfaction 96.88% were getting services quality and convenience, 90.73% were getting health workers' capacity and responsiveness, and 100% were getting easy access to service locations. MMTP services successful implementation of harm reduction program in Indonesia.

**Keywords:** Harm reduction, Methadone, MMTP, Patient-Satisfaction.

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## INTRODUCTION

An increasing number of injecting drug users (IDUs) are very fast in recent years has reached a worrying stage and it is followed by health and social problems associated with it. In recent years, drug problems are compounded by the spread of HIV / AIDS, Hepatitis B, and C significantly among IDUs. An estimated number of drug users around the world in 2005/2006 there were 200 million people, while in the year 2006/2007 increased to 208 million people. With this fact, it is estimated that the growth rate of drug abusers there was 0.04 per year. In Indonesia, the number of drug abusers about 3.3 million people in 2008, and will increase to 4.5 million people in the year 2013 [1]. In Indonesia, the number of injecting drug users (IDUs) around 236,172 people in 2008, and will increase to 312,909 people in 2013 [2].

On June 2011, according to the Ministry of Health report, the number of cumulative AIDS cases

reported were 26,483 cases. From the 26,483 cases of AIDS, a total of 9,597 cases of AIDS are IDUs. Sharing needles is the second highest risk factor after heterosexual. The age range of 20-29 years was the highest number. Yogyakarta is included in the top 10 provinces with the highest cumulative cases of AIDS as of June 2011. In 2009, the total number of AIDS cases in Yogyakarta is about 246 cases, 119 cases were IDUs [1].

Overdoses and deaths caused opioids have been declared a public health emergency around the world. The rising prevalence of opioid dependence, alongside the emergence of illicit drug market is contributing to premature mortality and sparking an urgent need to mobilize public health and public safety resources [3]. Interventions emphasize prevention, education, and comprehensive care, including access to substitution treatment were indicated [4]. Particular attention has been directed toward high-risk populations, including offenders (e.g., repeated

incarceration, low socioeconomic status, and homeless), compounding the hazard associated with substance misuse. The prevalence of opioid dependence and risk of death from illicit drug, such as heroin, is higher among offenders and is acutely elevated in the weeks following prison release.

Despite evidence that prevention and treatment options (e.g., methadone) may reduce risk of death among opioid dependent individuals. There remain significant barriers and under utilization of substitution treatment for offenders. Factor such as stigma, insufficient pharmacotherapy knowledge, concern related to medication diversion, and poor link between corrections and community based care providers can restrict access to methadone maintenance treatment (MMT) and continuity of care for drug user with opioid dependence [5].

Methadone Maintenance Treatment Program (MMTP) remains one of the best researched and most widely used opioid substitution treatments (OSTs). MMTP engagement is associated with reduced illicit opioid use, infectious disease transmission, and recidivism [6-8].

Patients with opioid dependence are at an risk of infectious diseases, including viral hepatitis and HIV. Premature death in these patients is multifactorial, but HIV/AIDS related complications and drug overdose represent the major causes of death in people who injecting drug. Illicit opioid use also has societal consequences, with individuals who are engaged in risky use of opioids being affected by poverty, homeless, and criminality more frequently than general population. Opioid addiction can be recognized as a relapsing condition that can be controlled through pharmacotherapy maintenance programs.

Harm reduction programs due to injecting drug use are necessary. One of the harm reduction approaches is Methadone Maintenance Treatment Program (MMTP). The goal of MMTP is to the reduction of drug use, high-risk behavior, criminal behavior, increase productivity, family support, and housing conditions. The implementation of Methadone Maintenance Therapy Program (MMTP) is carried out in the long term and involves the role of medical and non-medical personnel in its implementation. Achieving PTRM goals as one of the strategies for reducing the impact of HIV / AIDS prevention and increasing IDU productivity, in this case, the MMTP service unit needs to be designed in such a way that it is easily accessible to the wider community. MMTP are one of opioid agonist therapies, are the mainstay for treating opioid use disorder and preventing and managing HIV among people who inject drugs. However, coverage of this essential service remains very low in many low and middle – income countries, including in Southeast Asia,

where injection drug use involving opioids has been a key driver of HIV epidemics [9].

Moreover, while adherence to evidence – based treatment guidelines, including adequate dosing of methadone, has proven suboptimal in North America [10]. There is limited information on how methadone is provided in Southeast Asia [11]. MMTP has been implemented in 63 countries around the world. MMTP in Yogyakarta began in 2006. The implementation of MMTP in Yogyakarta was carried out at Sardjito Hospital as a hospital for PTRM management. Currently, in Yogyakarta, there are four MMTP clinic services (Grhasia hospital, Gedongtengen primary health care, Umbulharjo I primary health care, and Banguntapan II primary health care). Until now the MMTP implementation has not yet evaluated. The main purpose of this study was evaluated MMTP services achievement and patient satisfaction. Patient satisfaction is one of the important factors that influence sustainability in participating MMTP.

## METHOD

This study was an observational descriptive study design with a cross-sectional survey approach data collecting. This study has been approved by the Research Ethics Committee of Gadjah Mada University Medical Faculty with number Ref: KE / FK / 874 / EC and the Ethics Committee of the Grhasia Mental Hospital with number 423/4599. This study was conducted in September - December 2012.

The population included in this study were 32 active MMTP patients from a total of 39 active patients in four MMTP satellite services with purposive sampling, seven patients refused to participate. Inclusion criteria, all active MMTP patients have been registered as MMTP patients until November 2012, who have attended MMTP for at least 1 month. Exclusion criteria from this study were PTRM patients who refused to participate in the study.

The instrument in this study uses a questionnaire adapted from Evaluating of Methadone Maintenance Treatment Service, Capital Health Addiction Prevention and Treatment Service [12, 13] for MMTP services achievement and patient-satisfaction, interview guidelines, and document observation sheets. The data needed in this study were obtained from medical records of PTRM patients, questionnaire sheets, observation sheets, and interview results. The data obtained from measurement were processed with tabulation and descriptive explanations. The indicator measure included MMTP services and patient satisfaction.

## RESULT AND DISCUSSION

### Demographics of Participants

Based on gender, the majority of MMTP patients were male. By age group, 25-49 age group is the largest age group. Based on the level of education, PTRM patients with a high school education level were the highest in the Gedongtengen health center, Banguntapan II health center and RSJ. Grhasia. Based on marital status, the majority of patients in all four satellite PTRM satellites are married. Based on domicile, the majority of PTRM patients live in the city of Yogyakarta. The number of patients who received ARV therapy was 10 patients.

**Table-1: Demographics of MMTP Patient in Yogyakarta**

Demographic information	N	%
Gender		
Male	35	90
Female	4	10
Age (year)		
< 15	0	0
15-19	1	2.5
20-24	1	2.5
25-49	37	95
≥ 50	0	0
Marital status		
Married	21	54
Single	13	33
Divorced	5	13
Educational level		
Less than elementary	0	0
Elementary completed	0	0
Junior high school	6	15
High school	20	52
Diploma program	5	12.5
Undergraduate program	7	18
Master program	1	2.5
Residential region		
Sleman	11	28
Bantul	5	12.5
Yogyakarta	20	52
Another region	3	7.5
HIV-positive	10	26
Duration of methadone treatment		
≥1 month, < 6 month	13	33.33
≥ 6 month, < 12 month	7	17.95
≥ 12 month	19	48.72

### MMTP Services

MMTP is one approach to reducing harm due to the use of injecting narcotics (heroin). such as reducing HIV / AIDS transmission through the use of syringes alternately. The goal of MMTP is to reduce and even eliminate heroin use by stabilizing patients on methadone for as long as is necessary and to help them avoid returning to previous patterns of drug use and change in risk behaviours, particularly injecting drugs.

MMTP service generally can be categorized into methadone services and non-methadone services. The methadone service includes methadone take in place and methadone Take Home Dose (THD). Nonmethadone services include an explanation of MMTP, counseling, and discussion, laboratory, and physician examination.

Achievement of methadone services regarding the explanation of drinking methadone in place and take home dose (THD) reached 91% and 97%. Explanation of PTRM before the patient decides to take part in a 100% PTRM. The achievement of the smallest service is counseling about the importance of voluntary HIV counseling testing (VCT) with the attainment of 81%.

**Table-2: MMTP Services Achievement in Yogyakarta**

MMTP Service	N	(%)
Explaining taking methadone in place	29	91
Explaining taking home dose	31	97
Explaining the program procedure	32	100
Medical examination	28	88
Laboratory examination	29	91
Participate in group discussion	27	84
Counseling on VCT	26	81
Medication adherence counseling	29	91
HIV / AIDS counselling	28	88
Counseling on drug abuse	27	84

### Patient Satisfaction

Patient satisfaction is an important component of quality healthcare delivery. To inform the expansion of Methadone Maintenance Treatment (MMT) services in Yogyakarta, we examined the satisfaction of patients with regards to three indicator measure: “services quality and convenience”, “Health workers’ capacity and responsiveness” and “easy access to service locations” [14].

**Table-3: MMTP Patient Satisfaction in Yogyakarta**

Item satisfaction	N	(%)
services quality and convenience	31	97
Health workers’ capacity and responsiveness	29	91
Easy access to service locations	32	100

This article presents the findings of a large patient satisfaction survey for MMT clinics in Yogyakarta. The result shows a high level of patient satisfaction across three domains. The most commonly barriers to accessing MMTP stemmed from methadone provider negative attitudes toward methadone and patients who use drugs. Also indicated that a lack of trust characterized relationships between methadone providers and patients.

There are 3 factors that influence the participation of patients in MMTP. These three factors

are participant factors, program factors, and social factors. The patient's factor is motivation in joining MMTP. Motivation to follow the program can be categorized as internal and external motivation. Program factors can be in the form of ease of procedure in joining MMTP, level of satisfaction with MMTP and MMTP officers, ease of accessing MMTP locations, and attitudes of PTRM officers. Social factors can be in the form of family support, peer support, and support for the surrounding ecological environment. The cause of patients dropping out of MMTP is not only due to these 3 factors (participant factors, program factors, and social factors). Housing factors also affect the continuity of patients following MMTP. Patients who have a permanent residence will tend to follow MMTP continuously when compared to homeless patients [15-17].

An additional barrier that many participants referred to was the ready availability of illicit drugs in the local setting, where previous study also reported significant increases in the street-level availability of illicit drugs despite the intensified police crackdowns [18].

There were some limitations to this study. Firstly, the observation period was only 3 months. Thus, the outcome of MMTP may not be valid for longer periods. Secondly, the number of participating was small. Thirdly, the findings may not generalize to other cities in the Indonesia with different patient populations or different treatment culture. In addition, there were no clinical observations and side effects that occurred during methadone therapy.

## CONCLUSION

Methadone Maintenance Treatment Program (MMTP) services successful implementation of harm reduction program in harm reduction due to injecting drug use. Patients were highly satisfied with MMTP services in Indonesia.

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**Conflict of Interest:** The authors declare that they have no conflict of interests.

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